

## 10 References

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## New Reports

## Guidelines for Pulp and Paper LCA

A joint Nordic project has been conducted with a view to developing and documenting a methodology for the collection, processing and reporting of data, in such a way that Life Cycle Assessment (LCA) of forest industry products can be performed and combined in the same way. The work considers all steps from forestry to paper production, including transportations and recycling. It builds upon the methodological development and harmonization presented in the Nordic Guidelines on LCA. It also utilizes the more recent developments within the SETAC-Europe working group on Inventory Enhancement.

The project has been carried out by STFI and KCL (the Swedish and Finnish pulp and paper research institutes) and by Chalmers Industriteknik. The report from the project includes four parts which deal with the items considered to be most important in setting up a Life Cycle Inventory Analysis. These are:

- parameters and units
- data quality
- system boundaries
- allocation.

Within the section on parameters and units, a list has been compiled of the relevant variables relating to resources (materials and energy), emissions to air and water, and waste. The section establishes which units are appropriate for use with the proposed parameters. Also included are definitions of functional units and requirements for additional data.

The section on data quality deals with the demands that can be imposed on the data used in an inventory. These demands

may relate to data acquisition, references, age of data, representativeness, and geographical and technical correlations. A method has been developed for the quantitative expression of data quality in relation to the different demands.

The section on system boundaries focuses on production of electricity and fuel and chemicals. The significance of chemical production is illustrated by an example. The section on allocation includes several examples with the purpose to demonstrate different allocation methods. A ranking order for the best methods of dealing with allocation is proposed.

The title of the report is "Guidelines on Life Cycle Inventory Analysis of Pulp and Paper" (report No. NORDPAP/DP2/30). It can be ordered without charge from Nordisk Industrifond, Nedre Vollgatan 8, N-0158 Oslo, Norway (tel. +47-22 41 64 80; fax. +47-22 41 22 25), from CIT, Chalmers Teknikpark, S-412 88 Gothenburg, Sweden (fax. +46-31-82 74 21; e-mail tomas.ekvall@cit.chalmers.se), from STFI, Box 5604, S-114 86 Stockholm, Sweden (tel. +46-8-67 67 000; fax. +46-8-411 55 18), or from KCL, P.O. Box 70, FIN-02151 Espoo, Finland (tel. +358-9-437 11; fax. +358-9-46 43 05).

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